

REMARKS

This responds to the Office Action mailed on March 16, 2007.

Claims 1, 3, 5-13, 15-17, 19, 28-34, and withdrawn claim 4 are amended, no claims are canceled, and claims 35-40 are added; as a result, claims 1-40 are now pending in this application. The amendments to the claims are fully supported by the specification as originally filed. No new matter is introduced. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

The amendments to independent claims 7, 19, and 28 are based on features from claim 8. Claims 11, 13, and 15 are amended into independent form substantially including the limitations of the base claim and intervening claims, as originally filed. Amendments to the dependent claims are made in view of the language in the claims from which they depend. Support for the amendments to dependent claims 3 and 30 may be found in the specification, for example, page 9, lines 2-4. Support for the amendment to dependent claim 8 may be found in Figure 2A.

§112 Rejection of the Claims

Claims 1-34 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant traverses these grounds of rejection of these claims.

As noted in the Office Action, "hearing aids are widely used, and comprise housings that can be worn in or about an ear as well as housings that are worn on other parts of the body. Sometimes, the hearing aids are not even worn." Applicant submits that the specification provides support for application of the inventive subject matter in hearing aids. The embodiments described in the specification, taken as a whole, are not limited to a particular type of hearing aid, which, therefore, includes housing configurations "widely used."

Applicant submits that the specification as originally filed, taken as a whole, reasonably conveys to those skilled in the art that the Applicant was in possession of the claimed invention as of the date of invention. At page 5, lines 16-22, the specification recites:

In various embodiments, system 100 is a system that is realized with a miniaturized housing for use in locations having limited space. In an embodiment, system 100 is a hearing aid. A hearing aid is a hearing device that generally amplifies sound to compensate for poor hearing and is typically worn by a hearing impaired individual. In some instances, the hearing aid is a hearing device that

adjusts or modifies a frequency response to better match the frequency dependent hearing characteristics of a hearing impaired individual.

This quoted section of the specification notes that an embodiment of a inventive system may be realized as a hearing aid. There is no limitation or restriction regarding the type of a hearing aid for the various embodiments. The quote also notes that a hearing device is typically worn by an individual. Further support may be found in the specification, for example, at page 15, lines 16-22, which recites:

In various embodiments for hearing aid 300 having a single battery with multiple voltage taps, hearing aid 300 can include integrated circuits having die size reduced from current sizes or having functionality added to hearing aid 300 due to the reduction or elimination of voltage multipliers in hearing aid 300. Additionally, eliminating large hybrid components such as a multiplier capacitor would result in further gain in space for other components. Reducing the area and/or volume used in systems such as hearing aids that have limited space due to its inherent use allows for the expansion of the capabilities of these systems.

Clearly, to one skilled in the art, "hearing aids that have limited space due to its inherent use" include hearing aids having a "housing structured to mount in or about an ear of a person." For example, a hearing aid worn in the ear has "limited space due to its inherent use." Hearing aids that are worn on other parts of the body or not even worn may not have limited space constraints due to their inherent use. In the above quote and other sections, various embodiments described in the specification allow for reduced circuitry and reduction of the size of components such as semiconductor dies. Thus, Applicant submits that discussion of embodiments, in the specification, for hearing aids including those that have limited space due to its inherent use taken with the specification, as a whole, supports the claims of the instant application and no new matter is introduced into the claims of the instant application. Thus, Applicant submits that the § 112 rejections of the claims of the instant application are improper.

Applicant respectfully requests withdrawal of these rejections of claims 1-34, and reconsideration and allowance of these claims.

First §103 Rejection of the Claims

Claims 1-7, 10, 16, 19, 21, 25, and 28-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Penn (US 2,140,969) in view of Cohen et al. (US 4,204,036) and further in view of Hollingsworth (US 2,930,857). Applicant traverses these grounds of rejection of these claims.

Applicant cannot find in the combination of Penn, Cohen et al (hereafter Cohen), and Hollingsworth, as proffered in the Office Action, a teaching or a suggestion of a hearing aid that includes a single supply source having multiple voltage taps to provide different supply voltages, where the single supply source includes a common substrate on which a plurality of source regions are disposed such that each source region is structured to provide a supply voltage, and a management unit having circuitry to monitor the voltage level of each source region, as recited in amended claim 7. Therefore, Applicant submits that the combination of Penn, Cohen, and Hollingsworth does not teach all the elements of claim 7. Thus, Penn in view of Cohen in further view of Hollingsworth does not establish a proper *prima facie* case of obviousness with respect to claim 7 and Applicant submits that claim 7 is patentable over Penn in view of Cohen in further view of Hollingsworth.

For at least reasons similar to those discussed with respect to claim 7, Applicant submits that independent claims 19 and 28 are patentable over Penn in view of Cohen in further view of Hollingsworth. Further, Applicant submits that claims dependent from claims 7, 19, and 28 are patentable over Penn in view of Cohen in further view of Hollingsworth for at least the reasons stated herein.

Applicant respectfully requests withdrawal of these rejections of claims 1-7, 10, 16, 19, 21, 25, and 28-33, and reconsideration and allowance of these claims.

Second §103 Rejection of the Claims

Claims 12, 14, 17, 18, and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Penn in view of Cohen and further in view of Saaski et al. (US 6,310,960). Applicant traverses these grounds of rejection of these claims.

Applicant submits that applying Saaski et al. (hereafter Saaski) to Penn in view of Cohen, as proffered in the Office Action, does not cure the deficiencies of citing Penn in view of Cohen

in further view of Hollingsworth with respect to claims 7 and 28. As a result, Applicant submits that independent claims 7 and 28 are patentable over Penn in view of Cohen in further view of Saaksi. Claims 12, 14, 17, and 18 and claim 34 depend from claims 7 and 38, respectively. For at least the reasons stated herein, Applicant submits that claims 12, 14, 17, 18, and 34 are patentable over Penn in view of Cohen in further view of Saaksi.

Applicant respectfully requests withdrawal of these rejections of claims 12, 14, 17, 18, and 34, and reconsideration and allowance of these claims.

Third §103 Rejection of the Claims

Claims 19-24, 26, and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Penn in view of LaFollette et al. (US 6,610,44) in view of Cohen and further in view of Hollingsworth (US 2,930,857). Applicant traverses these grounds of rejection of these claims.

Applicant cannot find in the combination of Penn, LaFollette et al. (hereafter LaFollette), Cohen, and Hollingsworth, as proffered in the Office Action, a teaching or a suggestion of a hearing aid that includes a battery having multiple voltage taps to provide different supply voltages, where the battery includes a common substrate on which a plurality of battery regions are disposed such that each battery region is structured to provide a supply voltage, and a management unit having circuitry to monitor the voltage level of each battery region, as recited in amended claim 19. Therefore, Applicant submits that the combination of Penn, LaFollette, Cohen, and Hollingsworth does not teach all the elements of claim 19. Thus, Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth does not establish a proper *prima facie* case of obviousness with respect to claim 19, and Applicant submits that claim 19 is patentable over Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth.

Claims 20-24, 26, and 27 depend from claim 19. Applicant submits that claims 20-24, 26, and 27 are patentable over Penn in view of LaFollette further in view of Cohen for at least the reasons stated herein.

Applicant respectfully requests withdrawal of these rejections of claims 19-24, 26, and 27, and reconsideration and allowance of these claims.

Comments on claims 8, 9, 11, 13, and 15

In the Office Action mailed 18 April 2006, claims 8, 9, 11, 13, and 15 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Herein, claim 7 is amended to include features of claim 8. Claims 8 and 9 remain dependent on claim 7. As noted above, Applicant believes that claim 7 is patentable, as a result, claims 8 and 9 are patentable.

Claims 11, 13, and 15 are amended into independent form substantially including the limitations of the base claim and intervening claims, as originally filed. Applicant submits that claims 11, 13, and 15 are patentable.

Withdrawn Claims

Claim 4 depends on claim 7. Therefore, Applicant submits that claim 7 is generic to claim 4. With the allowance of claim 7, Applicant respectfully requests the rejoinder and allowance of claim 4. *See M.P.E.P. 809 and M.P.E.P. 821.04.*

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2157 to facilitate prosecution of this application.


If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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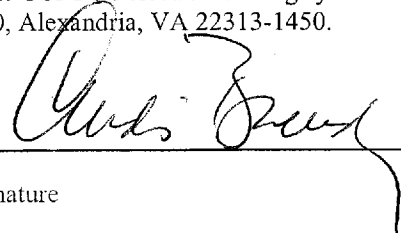
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This paper or fee is being filed on the date indicated above using the USPTO's electronic filing system EFS-Web, and is addressed to: The Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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